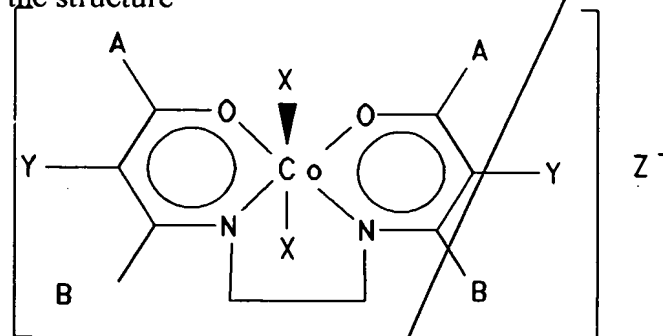


I claim:

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1. A method for preventing Human Immunodeficiency Virus infection in a subject comprising topically applying to the subject a composition comprising a Human Immunodeficiency Virus prophylactic effective amount of a compound having the structure

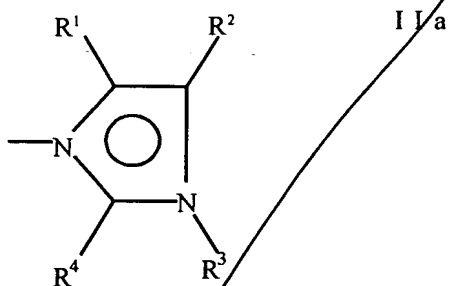


II

wherein each

- A may be the same or different and is an alkyl group, a phenyl group or a substituted derivative of a phenyl group;
- Y may be the same or different and is hydrogen, an unbranched alkyl group, a halide or a group having the structure $\text{R}-\text{C}(=\text{O})^-$ wherein R is hydrogen, an alkoxide group, an alkyl group, or OH;
- B may be the same or different and each is hydrogen or an alkyl group;
- Z⁻ is a soluble, pharmaceutically acceptable negative ion, and
- X may be the same or different and is an axial ligand selected from the group consisting of moieties having the formula:

pat. cont.



wherein R^1 , R^2 , R^3 , and R^4 may be the same or different and may be hydrogen or lower alkyl having from 1 to 4 carbon atoms;

with the proviso that R^1 , R^2 , R^3 , and R^4 are of a sufficiently small size so as not to prohibit the attachment of the axial ligand to the Co atom due to steric hindrance.

- 5 2. The method of claim 1 wherein the compound is from about 0.00005 to about 5% by weight of the composition.
3. The method of claim 1 wherein the compound is from about 0.005 to about 5% by weight of the composition.
4. The method of claim 1 wherein the compound is from about
10 0.005 to about 2% by weight of the composition.
5. The method of claim 1 wherein the compound is from about 0.01 to about 2% by weight of the composition.
6. The method of claim 1 wherein the composition is in the form of a pharmaceutically acceptable saline solution, ointment, salve, creme, or the like.
- 15 7. The method of claim 1 wherein the composition is applied to that site on the subject which is exposed to the Human Immunodeficiency Virus.

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9. The method of claim 7 wherein the composition is applied from about 1 hour before to about 6 hours after exposure to the Human Immunodeficiency Virus.

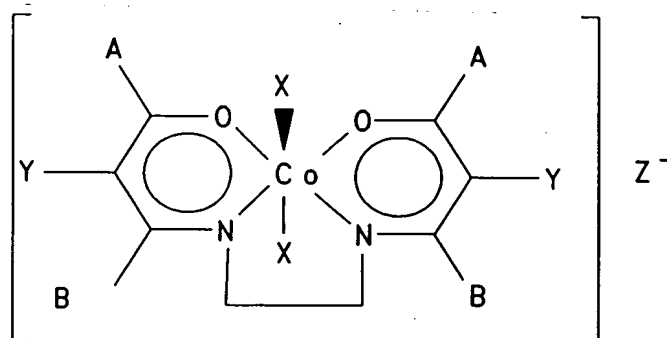
11. The method of claim 1 wherein the Human Immunodeficiency Virus is **STRAINS???**.

12. The method of claim 1 wherein the compound is Compound 96.

13. The method of claim 1 wherein the step of topically applying the composition is performed by contacting the subject with an applicator coated with the composition.

15 14. The method of claim 13 wherein the applicator is a condom.

16. A method for disinfecting a liquid containing a Human Immunodeficiency Virus comprising adding to the liquid a composition comprising a Human Immunodeficiency Virus prophylactic effective amount of a compound having the structure



II

wherein each

A may be the same or different and is an alkyl group, a phenyl group or a substituted derivative of a phenyl group;

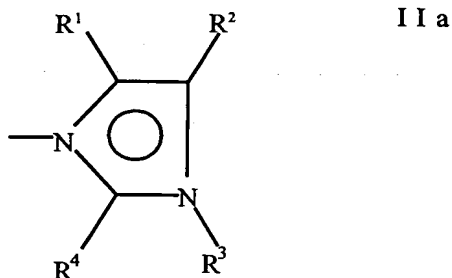
Y may be the same or different and is hydrogen, an unbranched alkyl group, a halide or a group having the structure $\begin{matrix} R-C \\ || \\ O \end{matrix}$ wherein R is hydrogen, an alkoxide group, an alkyl group, or OH;

B may be the same or different and each is hydrogen or an alkyl group;

Z⁻ is a soluble, pharmaceutically acceptable negative ion, and

X may be the same or different and is an axial ligand selected from the group consisting of moieties having the formula:

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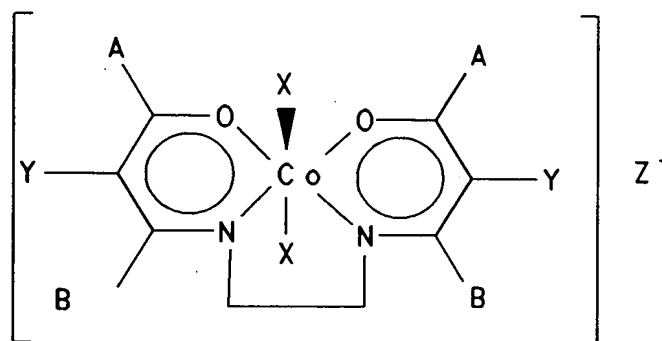


wherein R¹, R², R³, and R⁴ may be the same or different and may be hydrogen or lower alkyl having from 1 to 4 carbon atoms;

with the proviso that R^1 , R^2 , R^3 , and R^4 are of a sufficiently small size so as not to prohibit the attachment of the axial ligand to the Co atom due to steric hindrance.

- 5 16. The method of claim 15 wherein the compound is added in an
amount of about 0.00005 to about 5% by weight of the liquid.
17. The method of claim 15 wherein the compound is added in an
amount of about 0.005 to about 5% by weight of the liquid.
18. The method of claim 15 wherein the compound is added in an
10 amount of about 0.005 to about 2% by weight of the liquid.
19. The method of claim 15 wherein the compound is added in an
amount of about 0.01 to about 2% by weight of the liquid.
20. The method of claim 15 wherein the liquid is a growth media or
a blood-derived product.

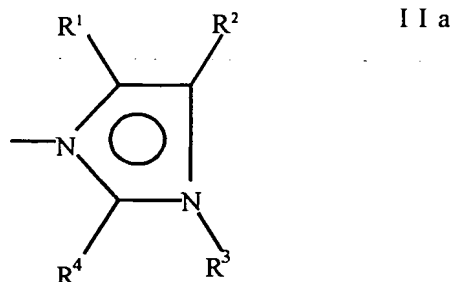
21. A method for preventing Human Papillomavirus infection in a subject comprising topically applying to the subject a composition comprising a Human Papillomavirus prophylactic effective amount of a compound having the structure



II

wherein each

- 5 A may be the same or different and is an alkyl group, a phenyl group or a substituted derivative of a phenyl group;
- Y may be the same or different and is hydrogen, an unbranched alkyl group, a halide or a group having the structure $\begin{matrix} R-C- \\ || \\ O \end{matrix}$ wherein R is hydrogen, an alkoxide group, an alkyl group, or OH;
- 10 B may be the same or different and each is hydrogen or an alkyl group;
- Z⁻ is a soluble, pharmaceutically acceptable negative ion, and
- X may be the same or different and is an axial ligand selected from the group consisting of moieties having the formula:



wherein R^1 , R^2 , R^3 , and R^4 may be the same or different and may be hydrogen or lower alkyl having from 1 to 4 carbon atoms;

with the proviso that R^1 , R^2 , R^3 , and R^4 are of a sufficiently small size so as not to prohibit the attachment of the axial ligand to the Co atom due to steric hindrance.

5 22. The method of claim 21 wherein the compound is from about 0.00005 to about 5% by weight of the composition.

 23. The method of claim 21 wherein the compound is from about 0.005 to about 5% by weight of the composition.

 24. The method of claim 21 wherein the compound is from about
10 0.005 to about 2% by weight of the composition.

 25. The method of claim 21 wherein the compound is from about 0.01 to about 2% by weight of the composition.

 26. The method of claim 21 wherein the composition is in the form of a pharmaceutically acceptable saline solution, ointment, salve, creme, or the like.

15 27. The method of claim 21 wherein the composition is applied to that site on the subject which is exposed to the Human Papillomavirus.

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28. The method of claim 27 wherein the composition is applied intravaginally.

29. The method of claim 27 wherein the composition is applied from about 1 hour before to about 6 hours after exposure to the Human Papillomavirus.

30. The method of claim 27 wherein the composition is applied from about 5 minutes before to about 5 minutes after exposure to the Human Papillomavirus.

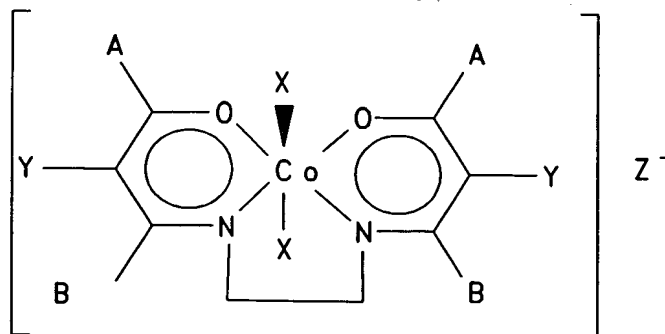
31. The method of claim 21 wherein the Human Papillomavirus is selected from the group consisting of HPV-1, HPV-2, HPV-3, HPV-4, HPV-6, HPV-7, HPV-10, HPV-11, HPV-16, HPV-18, HPV-31 or HPV-45.

32. The method of claim 21 wherein the compound is CTC 96.

33. The method of claim 21 wherein the step of topically applying the composition is performed by contacting the subject with an applicator coated with the composition.

34. The method of claim 33 wherein the applicator is a condom.

35. A method for disinfecting a liquid containing a Human Papillomavirus comprising adding to the liquid a composition comprising a Human Papillomavirus prophylactic effective amount of a compound having the structure.



wherein each

A may be the same or different and is an alkyl group, a phenyl group or a substituted derivative of a phenyl group;

Y may be the same or different and is hydrogen, an unbranched alkyl group, a halide or a group having the structure $\text{R}-\text{C}(=\text{O})\text{O}^-$ wherein R is hydrogen, an alkoxide group, an alkyl group, or OH;

B may be the same or different and each is hydrogen or an alkyl group;

Z⁻ is a soluble, pharmaceutically acceptable negative ion, and

X may be the same or different and is an axial ligand selected from the group consisting of moieties having the formula:



with the proviso that R^1 , R^2 , R^3 , and R^4 are of a sufficiently small size so as not to prohibit the attachment of the axial ligand to the Co atom due to steric hindrance.

37. The method of claim 35 wherein the compound is added in an amount of about 0.005 to about 5% by weight of the liquid.

39. The method of claim 35 wherein the compound is added in an amount of about 0.01 to about 2% by weight of the liquid.

40. The method of claim 35 wherein the liquid is a growth media or a blood-derived product.

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